End of Unit Test Review

OUR CHANGING EARTH

PREDATION IS

- * The change in a species over time
- A group of the same species occupying the same space
- The capture, killing, and consumption of one animal by another

MUTUALISM IS _______.

- Traits that increase an organisms chance of survival
- The change in a species over time
- A relationship in which one member benefits and the other is neither harmed nor benefits
- * A relationship where all members benefit

PARASITISM IS

- An accidental change in a gene that can be either helpful or harmful
- A relationship where one member benefits and the other is harmed
- * A relationship in which both members benefit

COMPETITION IS

- The capture, killing and consumption of one animal by another
- The success of an organism in passing its genes to the next generation through its offspring
- The simultaneous demand by two or more organisms for a common resource

EVOLUTION

- * The change in a species over time
- An accidental change in a gene that can be either helpful or harmful
- Traits that increase an organisms chance of survival

FITNESS

- The success of an organism in passing its genes to the next generation through its offspring
- A group of the same species living in a specific area
- Traits that increase an organisms chance of survival

ADAPTIVE TRAIT IS

- A trait that increases an organisms chance of survival
- The success of an organism in passing its genes to the next generation through its offspring
- An accidental change in a gene that can be either helpful or harmful

MUTATION IS

- An accidental change in a gene that can be either helpful or harmful
- The change in a species over time
- Traits that increase an organisms chance of survival

POPULATION IS

- * The change in a species over time
- A group of the same species occupying a particular geographic region
- The success of an organism in passing its genes to the next generation through its offspring

COMMENSALISM IS

- A symbiotic relationship in which both members benefit
- A symbiotic relationship where one organism is harmed and the other benefits
- A symbiotic relationship where once organism benefits and the other is unaffected

CHARLES DARWIN'S MOST IMPROTANT SPECIMENS CAME FROM THE _____ ISLANDS.

- Canary
- Hawaiian
- Cayman
- Galapagos

NAME TWO WAYS IN WHICH ORGANISMS CAN BE PRESSURED TO CHANGE

- Drought and flood
- Climate change and predation
- Competition and adaptation
- The environment in which they live and other organisms with which they interact

THE "FATHER OF EVOLUTION" IS

- Carolus Linneaus
- * Walter Alvarez
- Charles Darwin
- Dr. Stetter
- × Dr. Woese
- * Sir Isaac Newton

THE VARIATIONS IN BEAK SIZE AND SHAPE OF DARWIN'S FINCHES IS AN EXAMPLE OF _____.

- × A mutation
- An adaptive trait
- * Artificial selection

BEAD BUG

Here you are a little red Bead Bug and you find yourself in a yellow meadow. Can you change color to adapt to your environment? Why or why not?



PUT THESE GROUPS OF ANIMALS IN THE ORDER IN WHICH THEY EVOLVED.

mammals, humans, bacteria, fish, invertebrates, amphibians, reptiles, birds

FITNESS - CAN YOU IDENTIFY THE MOST FIT?



Super Spidey age at death: 63 days web strength: excellent # of offspring: 765 offspring surviving to adulthood: 16



Black Widow age at death: 33 days web strength: moderate # of offspring: 156 offspring surviving to adulthood: 27



Super Panda age at death: 44 years jaw strength: outstanding # number of offspring: 2 offspring surviving to adulthood: 2

BUNNY POPULATIONS

* Alaska Bunnies









A white mutation occurs in this population of brown rabbits living in Alaska. Predict what you think will happen to this population over time.

BUNNY POPULATIONS









This population of brown rabbits live in southern Florida. A white mutation occurs, what do you think will happen to this population over time?

BEAD BUGS



This is a Bead Bug Meadow. The population of Bead Bugs is yellow and light blue. Can you describe a mutation that would be adaptive to this meadow and one that would not be?

SICKLE CELL ANEMIA

Sickle Cell Anemia is found in many regions of Africa. Carriers of the Sickle Cell Gene have some resistance to ______.

SURVIVAL STRATEGIES

- Overproduction is a strategy whereby:
 - + An organism produces too much salt and sprays the excess out of its nose
 - + An organism produces lots of offspring so that some can survive predation
 - + An organism produces too much muscle and needs to rest often

EVOLUTION

- Natural selection changes a species over time because the members of each generation have small differences or _____ that make them better adapted to their environment than others.
- × A, similarities B. preferences
- **x** C. variations D. competitions

QUOTES

Explain the quote, "Life is molded by the challenges it faces."

QUOTES

Explain the quote, "The cast of life's drama is never fixed it chances over time as the victorious survive."

VOYAGE

* Charles Darwin sailed aboard the

DNA

The shape of a DNA molecule looks like a twisted ladder and is called a _____.

SICKLE CELL ANEMIA

* This disease is caused by an error on one gene. This gene tells the body how to make _____, a protein found in red blood cells that carries oxygen.

GENETICS

A gene that is expressed over another gene is said to be ______.

A trait that requires you to have two of the same _____ is said to be recessive.

GENETICS

If a person has the genotype BB for hair color, they are said to be ______ for that trait.

***** A. heterozygous B. homozygous

C. carriers
D. recessive

GENETICS

- If I have brown hair and my genes are Bb. What is my genotype?
 - + Phenotype? _____